

IN THE CLAIMS

1-26. (Presently canceled)

27. (New) An isolated nucleic acid molecule selected from the group consisting of:

(a) a nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:12 or SEQ ID NO:15;

(b) a nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:5, SEQ ID NO:8, SEQ ID NO:11 or SEQ ID NO:14;

(c) a nucleic acid molecule comprising the nucleotide sequence contained in the plasmid deposited with ATCC® as Accession Number 203308, 203306, 203309, 203307 or 203305;

(d) a nucleic acid molecule which encodes a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:2, wherein the nucleic acid molecule hybridizes to a nucleic acid molecule comprising SEQ ID NO:1 or 3 under stringent conditions;

(e) a nucleic acid molecule which encodes a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:5, wherein the nucleic acid molecule hybridizes to a nucleic acid molecule comprising SEQ ID NO:4 or 6 under stringent conditions;

(f) a nucleic acid molecule which encodes a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:8, wherein the nucleic acid molecule hybridizes to a nucleic acid molecule comprising SEQ ID NO:7 or 9 under stringent conditions;

(g) a nucleic acid molecule which encodes a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:11, wherein the nucleic acid molecule hybridizes to a nucleic acid molecule comprising SEQ ID NO:10 or 12 under stringent conditions;

(h) a nucleic acid molecule which encodes a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:14, wherein the nucleic acid molecule hybridizes to a nucleic acid molecule comprising SEQ ID NO:13 or 15 under stringent conditions.

(i) a nucleic acid molecule comprising a nucleotide sequence which is at least 60% homologous to the nucleotide sequence of SEQ ID NO:1, 3, 4, 6, 7, 9, 10, 12, or 15, or a complement thereof;

(j) a nucleic acid molecule comprising a fragment of at least 200 nucleotides of a nucleic acid comprising the nucleotide sequence of SEQ ID NO:1, 3, 4, 6, 7, 9, 10, 12, or 15, or a complement thereof;

(k) a nucleic acid molecule which encodes a polypeptide comprising an amino acid sequence at least about 60% homologous to the amino acid sequence of SEQ ID NO:2, 5, 8, 11, or 14; and

(l) a nucleic acid molecule which encodes a fragment of a polypeptide comprising the amino acid sequence of SEQ ID NO:2, 5, 8, 11, or 14, wherein the fragment comprises at least 15 contiguous amino acid residues of the amino acid sequence of SEQ ID NO:2, 5, 8, 11, or 14.

28. (New): An isolated nucleic acid molecule which hybridizes to the nucleic acid molecule of claim 27 under stringent conditions.

29. (New): An isolated nucleic acid molecule comprising a nucleotide sequence which is complementary to the nucleotide sequence of the nucleic acid molecule of claim 27.

30. (New): An isolated nucleic acid molecule comprising the nucleic acid molecule of claim 27, and a nucleotide sequence encoding a heterologous polypeptide.

31. (New): A vector comprising the nucleic acid molecule of claim 27.

32. (New): The vector of claim 31, which is an expression vector.

33. (New): A host cell transfected with the vector of claim 32.

34. (New): A method of producing a polypeptide comprising culturing a host cell transfected with the vector of claim 32 in an appropriate culture medium to, thereby, produce the polypeptide.

35. (New): An isolated polypeptide selected from the group consisting of:

a) a fragment of a polypeptide comprising the amino acid sequence of SEQ ID NO:2, 5, 8, 11, or 14, wherein the fragment comprises at least 15 contiguous amino acids of SEQ ID NO:2, 5, 8, 11, or 14;

b) a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:2, 5, 8, 11, or 14, wherein the polypeptide is encoded by a

nucleic acid molecule which hybridizes to a nucleic acid molecule comprising SEQ ID NO:1, 3, 4, 6, 7, 9, 10, 12, 13, or 15 under stringent conditions;

c) a polypeptide which is encoded by a nucleic acid molecule comprising a nucleotide sequence which is at least 60 % homologous to a nucleic acid comprising the nucleotide sequence of SEQ ID NO:1, 3, 4, 6, 7, 9, 10, 12, 13, or 15;

d) a polypeptide comprising an amino acid sequence which is at least 60% homologous to the amino acid sequence of SEQ ID NO:2, 5, 8, 11, or 14.

36. (New): The isolated polypeptide of claim 35 comprising the amino acid sequence of SEQ ID NO:2, 5, 8, 11, or 14.

37. (New): The polypeptide of claim 35, further comprising heterologous amino acid sequences.

38. (New): An antibody which selectively binds to a polypeptide of claim 35.

39. (New): A method for detecting the presence of a polypeptide of claim 35 in a sample comprising:

- a) contacting the sample with a compound which selectively binds to the polypeptide; and
- b) determining whether the compound binds to the polypeptide in the sample to thereby detect the presence of a polypeptide of claim 35 in the sample.

40. (New): The method of claim 39, wherein the compound which binds to the polypeptide is an antibody.

41. (New): A kit comprising a compound which selectively binds to a polypeptide of claim 35 and instructions for use.

42. (New): A method for detecting the presence of a nucleic acid molecule of claim 27 in a sample comprising:

- a) contacting the sample with a nucleic acid probe or primer which selectively hybridizes to the nucleic acid molecule; and
- b) determining whether the nucleic acid probe or primer binds to a nucleic acid molecule in the sample to thereby detect the presence of a nucleic acid molecule of claim 27 in the sample.

43. (New): The method of claim 42, wherein the sample comprises mRNA molecules and is contacted with a nucleic acid probe.

44. (New): A kit comprising a compound which selectively hybridizes to a nucleic acid molecule of claim 27 and instructions for use.

45. (New): A method for identifying a compound which binds to a polypeptide of claim 35 comprising:

- a) contacting the polypeptide, or a cell expressing the polypeptide with a test compound; and
- b) determining whether the polypeptide binds to the test compound.

46. (New): The method of claim 45, wherein the binding of the test compound to the polypeptide is detected by a method selected from the group consisting of:

- a) detection of binding by direct detection of test compound/polypeptide binding;
- b) detection of binding using a competition binding assay; and
- c) detection of binding using an assay for CSAPK activity.

47. (New): A method for modulating the activity of a polypeptide of claim 35 comprising contacting the polypeptide or a cell expressing the polypeptide with a compound which binds to the polypeptide in a sufficient concentration to modulate the activity of the polypeptide.

48. (New): A method for identifying a compound which modulates the activity of a polypeptide of claim 35 comprising:

- a) contacting a polypeptide of claim 35 with a test compound; and
- b) determining the effect of the test compound on the activity of the polypeptide to thereby identify a compound which modulates the activity of the polypeptide.